Table 1. Intra-individual variabilities in results of the standard and modified oral glucose tolerance tests during the first 30 min

Subject	Age (years)	Body mass index (kg m^{-2})	CV 15 (%)[a]		CV 30 (%)[b]	
			Standard	Modified	Standard	Modified
A	31	26.0	43.2	16.2	24.7	14.6
B	29	23.9	46.5	27.4	22.1	18.0
C	24	21.7	40.3	25.0	23.2	19.6

[a]CV 15, coefficients of variation for differences in plasma glucose concentrations between 0 and 15 min.
[b]CV 30, coefficients of variation for differences in plasma glucose concentrations between 0 and 30 min.

lateral decubitus on the intra-individual variability in OGTTs.

Three healthy male volunteers were studied. After overnight fast, each underwent the five standard and the five modified OGTTs within 2 months. Immediately after obtaining fasting blood samples (0 min), 200 ml water containing 75 g glucose was consumed in a sitting position. Consecutive blood samples were obtained at 15, 30, and 60 min. In the standard OGTTs, the sitting position was maintained throughout the tests. In the modified OGTTs, the volunteers kept themselves in the sitting position from 0 to 5 min to prevent the gastro-oesophageal reflux, moved into the right lateral position from 5 to 30 min, and resumed the sitting position thereafter. The intra-individual variation was expressed as a coefficient of variation for difference in plasma glucose concentrations between 0 and 15 min (Δ 15) and that between 0 and 30 min (Δ 30). In addition, Δ 15 and Δ 30 were compared between the standard and the modified OGTTs in every subject by the Mann–Whitney test.

Table 1 shows that the intra-individual variabilities during the first 30 min were smaller in the modified than in the standard OGTTs. Figure 1 demonstrates the most representative time–concentration curves. However, the differences in Δ 15 and Δ 30 were not significant ($p > 0.05$) in all subjects, suggesting that the right lateral decubitus did not necessarily promote the rate of glucose absorption.

In the sitting position, plasma glucose levels in the early course of OGTTs become unexpectedly high (low) when the timing of glucose ingestion incidentally meets the active (quiescent) phase of gastric motility.[4,6] Thereby, the time-course of the standard OGTTs during the early phase can vary considerably. In the right lateral position, on the other hand, GER is governed by gravity regardless of the phase of gastric motility.[5] Indeed, the rate of glucose absorption may not always be hastened, but the gravity-dependent GER is considered more constant. This is the likely explanation for the reduced variabilities in the modified OGTTs. The modified OGTT may be more sensitive in the diagnosis of impaired glucose tolerance, but further studies are required regarding its clinical usefulness.

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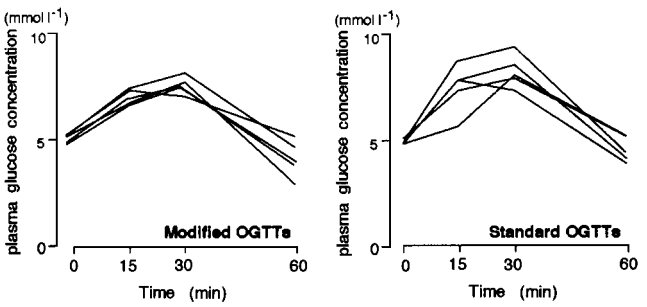

Figure 1. The most representative time–glucose concentration profiles in the modified and standard oral glucose tolerance test (OGTT) in subject A. A smaller intra-individual variation from 0 to 30 min is noted in the modified than in the standard OGTTs

Commercially Sponsored Supplements

In a recent letter,[1] Dr Michael Berger was critical of the publication of 'commercially sponsored supplements' to *Diabetic Medicine*. His letter was prompted by a Bayer-sponsored supplement on the postprandial state and the risk of atherosclerosis and included direct criticism of our contribution to that supplement. Dr Berger's criticism was that we considered the use of acarbose and glibenclamide for the treatment of Type 2 diabetes 'without relationship to the title' of the supplement. Acarbose, an alpha-glucosidase inhibitor inhibits the release of glucose from oligo- and complex carbohydrates in the small intestine[2] and so reduces postprandial hyperglycaemia,[3] postprandial hyperinsulinaemia,[3,4] postprandial hypertriglyceridaemia[4] and postprandial coagulation activation.[5] Thus, acarbose is a prominent candidate to correct abnormalities in the postprandial phase in Type 2 diabetic subjects. Dr Berger expresses concern about 'the lack of any meaningful lowering of HbA_{1c} in a properly controlled trial as the UKPDS'. There are, however, numerous publications of carefully controlled trials[3,4,6,7] that prove the efficacy and safety of acarbose in long-term trials. In Holman's publication, to which he refers,[8] acarbose reduced HbA_{1c} by 0.7 % which is in the same range as with glibenclamide and insulin in the UKPDS.[9] With respect to safety Dr Berger refers to a statement from a conference he organized to scrutinize efficacy and safety

of acarbose.[10] In contrast to Dr Berger's statement, acarbose is very safe and no fatal cases or persistent side-effects have so far been published despite the fact that acarbose has been used worldwide for many years.

In conclusion, we stand by our publication and believe that the supplement should have been read with an open mind!

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Editor's Note

The Editor is glad to publish the above letter from the authors, defending themselves against a criticism made in an earlier letter from Professor Michael Berger (*Diabetic Med* 1998; **15**: 85). Professor Berger's letter rightly drew our attention and our readers' attention to the difficulties of commercially sponsored supplements for scientific journals. This journal is happy to publish supplements (usually the proceedings of scientific meetings) with commercial sponsorship, provided that the contents of those supplements are considered novel and of interest to our readers. All supplements are approved by the editorial office and undergo guest editing and/or peer review. The Editor will continue to accept supplements which fulfil the criteria (in our opinion) of being of interest to our readers.